Quick Facts: Invasive Pneumococcal Disease

What is Invasive Pneumococcal Disease?

Streptococcus pneumoniae bacteria cause many types of infections such as ear and sinus infections. It is the most common cause of lung infections (pneumonia). When the bacteria cause any type of infection, it is known as pneumococcal disease. The bacteria can infect wounds, be inhaled, and enter normally sterile areas of the body where bacteria should not be found, such as the blood or fluid surrounding the brain and spinal cord. When bacteria enter these sterile areas, a severe, life-threatening infection ("invasive disease") can develop. Around 800 cases of invasive pneumococcal infection occur each year in the state of Indiana.

What are the symptoms of invasive pneumococcal disease?

Symptoms of pneumococcal disease will depend on the site of infection. Pneumonia, bacteremia (illness caused by bacteria in the blood), and meningitis are all possible consequences of invasive pneumococcal disease. These conditions may present with a any of a large range of symptoms, possibly including, but not limited to: fevers, chills, muscle tensing, headaches, difficulty breathing, chest pain, vomiting, seizures, or lethargy.

How is invasive pneumococcal disease spread?

The bacteria are spread by contact with nose or throat droplets from an infected person. This can happen when an infected person coughs or sneezes. Healthy people can also carry the bacteria.

Who is at risk for invasive pneumococcal disease?

The disease is most common in children under two years of age, children who attend day care centers, the elderly or those with weak immune systems, smokers, and people with certain illnesses (such as HIV or sickle-cell anemia). Vaccination can lower the risk of infection.

How do I know if I have invasive pneumococcal disease?

Symptoms of pneumococcal disease will depend on the site of infection.
Symptoms include:
- Chills
- High fever

- Severe headache
- Stiff neck
- Chest pain
- Cough
- Ear pressure and sinus pain

If you feel that you may have an infection, or if you have been exposed to someone with the disease and have these symptoms, talk to your doctor right away. Your doctor may collect blood or samples from other sites of infection to see if the bacteria are present.

How can invasive pneumococcal disease be treated?

Pneumococcal disease can be treated with antibiotics. Early treatment may reduce the risk of death from the disease. Hospitalization may be needed for those with severe infection.

How is invasive pneumococcal disease prevented?

There are two vaccines that protect against most types of this disease. One vaccine (Prevnar 13®) is for children ages 2 months through 5 years and is now given as a routine childhood vaccination. It may also be given to adults 19 years or older with certain medical conditions who have not been previously vaccinated against this disease. Another vaccine (Pneumovax®) is for persons over 65 years of age and certain people aged 2 and older with weakened immune systems. All people 65 years and older should get this vaccine.

All information presented is intended for public use. More information on Invasive pneumococcal disease can be found at:
- http://www.cdc.gov/vaccines/vpd-vac/pneumo/in-short-both.htm
- http://www.cdc.gov/vaccines/hcp/acip-recs/vacc-specific/pneumo.html
- http://www.cdc.gov/pneumococcal/about/index.html